

 <p>Financial Assistance Award</p> <p>DENALI COMMISSION 510 L Street, Suite 410 Anchorage, Alaska 99501 (907) 271-1414 (phone) (907) 271-1415 (fax) www.denali.gov</p>		Award Number	01507-00																																																																													
		Award Title	Mertarvik Energy Planning and Design																																																																													
		Performance Period	October 15, 2016 through March 30, 2018																																																																													
Authority 112 Stat 1854	CFDA Number 90.100	<u>Recipient Organization & Address</u> Alaska Energy Authority 813 W Northern Lights Blvd Anchorage, AK 99503-2407 Phone: 907-771-3000 Recipient DUNS # 054072608 TIN # 926001185																																																																														
Denali Commission Finance Officer Certification																																																																																
<u>Cost Share Distribution Table</u> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">Accounting Code</th> <th colspan="2">New Funding</th> <th colspan="2">Prior Period Funding</th> <th rowspan="2">Total</th> </tr> <tr> <th>Denali Commission</th> <th>Other Contributors</th> <th>Denali Commission</th> <th>Other Contributors</th> </tr> </thead> <tbody> <tr> <td>95670000</td> <td>\$379,430.00</td> <td></td> <td>\$0.00</td> <td></td> <td>\$379,430.00</td> </tr> <tr> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> </tr> <tr> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> <td>\$0.00</td> </tr> <tr> <td></td> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> <td>\$0.00</td> </tr> <tr> <td></td> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> <td>\$0.00</td> </tr> <tr> <td></td> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> <td>\$0.00</td> </tr> <tr> <td></td> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> <td>\$0.00</td> </tr> <tr> <td>Total</td> <td>\$379,430.00</td> <td>\$0.00</td> <td>\$0.00</td> <td>\$0.00</td> <td>\$379,430.00</td> </tr> </tbody> </table>					Accounting Code	New Funding		Prior Period Funding		Total	Denali Commission	Other Contributors	Denali Commission	Other Contributors	95670000	\$379,430.00		\$0.00		\$379,430.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00															\$0.00		\$0.00	\$0.00			\$0.00		\$0.00	\$0.00			\$0.00		\$0.00	\$0.00			\$0.00		\$0.00	\$0.00			\$0.00		\$0.00	\$0.00	Total	\$379,430.00	\$0.00	\$0.00	\$0.00	\$379,430.00
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Signature of Authorized Official - Denali Commission Electronically Signed		Typed Name and Title Mr. Jay Farmwald Director of Programs		Date 10/31/2016																																																																												

AWARD ATTACHMENTS

Alaska Energy Authority

01507-00

1. Terms and Conditions
2. Attachment A

**Financial Assistance Award Terms and Conditions
Between the Denali Commission and Alaska Energy Authority (AEA)
For Mertarvik Energy Planning and Design
Award No. 1507**

1. Project Summary

- a. Scope of Work: Develop an energy master plan for the relocation of the Village of Newtok to Mertarvik, including decommissioning at the old site and development at the new site; complete design work for a new diesel powerhouse including associated heat recovery system and electrical grid; and complete design work for a bulk fuel system including fuel header and fuel dispensing systems.
- b. Deliverables: The recipient shall provide a final energy master plan and bid-ready plans and specifications for the diesel power house, bulk fuel farm and associated systems.
- c. Budget: The budget for this scope of work is \$700,000. The Commission is currently making \$ 379,430 available for the project via this Financial Assistance Award (FAA). It is anticipated that additional funding will be made available via a subsequent amendment in order to complete the scope of work. This total amount includes all direct and indirect costs. All Commission funding is intended to be used for the scope of work identified in this FAA only. Any funds remaining after the full scope of work has been completed shall be returned to the Denali Commission consistent with 2 CFR 200.319.
- d. Delivery Method: AEA will provide overall coordination of energy systems designs with the Owner (Newtok Village Council), other agencies, and contractors performing work related to the relocation effort. AEA will utilize existing architectural and engineering (AE) term contractors to develop design products. Cooperative agreement provisions apply; see Attachment A, dated 11 October 2016, for additional details.
- e. Performance Period: The Period of Performance for this FAA is 15 October 2016 through 31 December 2017. In accordance with 2 CFR 200.309 Recipients can only incur obligations or costs against this FAA during the Period of Performance, unless specifically authorized in the Special Provisions (Section 14 of this document). If a project cannot be completed within the approved Period of Performance, an extension request must be

made in accordance with the Commission's *Recipient Guidelines and requirements* (RGR) document dated July 2015, available at www.denali.gov.

More detailed information on scope, deliverables, budget, funding, project delivery method and/or management plan, schedule and key milestones are included in Attachment A dated 11 October 2016.

2. Project Reporting and Commission Site Visits

Progress reports and a close-out report are required under this FAA. Progress Reports shall be submitted at the frequency stipulated in the Special Provisions. The Closeout Report shall be completed within 90-days of the end of the Period of Performance. All reports must be submitted using the Denali Commission's on-line Project Database System, available at www.denali.gov/dcpdb.

Commission staff or agents of the Commission may make visits to the project site and/or home office to monitor progress during and/or after the Period of Performance. The Recipient shall coordinate and make information available as necessary to facilitate any such site visits.

Refer to the *Recipient Guidelines and Requirements* document for further information related to reports and site visits.

3. Payments

Payments under this FAA will be made in accordance with 2 CFR 200.305 by electronic transfer in response to a Standard Form 270 (SF-270) "Request for Advance or Reimbursement", submitted by the Recipient. At a minimum, all 270's must include summary cost information on labor, materials, contracts/consultants, and indirect costs. Detailed documentation is required for any single expenditure greater than \$50,000. If Pre-award Costs and/or Advance Payments are authorized under this FAA, the Special Provisions will indicate so. Requests for reimbursements may be made as needed. Refer to the *Recipient Guidelines and Requirements* document for further information about submitting SF-270's.

4. Modifications

In accordance with 2 CFR 200.308, the Recipient shall report deviations in project scope, budget, delivery method, management plan, schedule, or changed site conditions, and request prior approvals from the Program Manager. The Recipient shall also submit written requests to the Program Manager for the replacement of Key Staff identified in the Special Provisions. Refer to the *Recipient Guidelines and Requirements* document for further information about modifying a Financial Assistance Award.

5. Financial Management, Record Keeping, Internal Controls, and Audits

The Recipient must have financial management and record keeping systems that are consistent with 2 CFR 200.302. If the Recipient is a State organization, it must expend and account for FAA funds in accordance with applicable State laws and procedures for expending and accounting for the State's own funds.

The Recipient must establish and maintain effective internal controls with respect to this FAA that are consistent with 2 CFR 200.303.

In accordance with 2 CFR 200.501, Recipients that expend \$750,000 or more of federal funds in a year shall have a single or program-specific audit conducted for that year.

Refer to the *Recipient Guidelines and Requirements* document for further information about financial management, record keeping, internal controls and audits.

6. Direct and Indirect Costs

All direct costs must be allowable and reasonable. Indirect costs must be allocable based on accepted accounting policies and practices. Indirect costs must be specifically included as a line item or identified with appropriate notes in the approved FAA budget. Refer to 2 CFR 200 Subpart E (Cost Principles) and the *Recipient Guidelines and Requirements* document for further information on direct and indirect costs.

7. Sub-Awards and Contracts

All sub-awards and contracts issued by the Recipient under this FAA must comply with 2 CFR 200.331 and Appendix II to 2 CFR 200. Refer to the *Recipient Guidelines and Requirements* document for further information on this subject.

8. Acknowledgement of Support

The Recipient shall name the Denali Commission as a financial contributor and project/program partner in all media correspondence related to the work supported by this FAA. If Commission funds are used for construction, the Recipient shall also display a sign at the construction site that acknowledges the Commission's support. Refer to the *Recipient Guidelines and Requirements* document for further information on this subject.

9. Real and Personal Property

In accordance with 2 CFR 200.311, 313, and 316 the Denali Commission may require the Recipient to execute a security interest or other public notice of record to indicate that real or personal property acquired or improved, in whole or in part, with Federal funds is subject to a Federal interest. Any such

requirements under this FAA, including post project reporting in accordance with 2 CFR 200.329, will be stipulated in the Special Provisions.

10. Conflict of Interest

In accordance with 2 CFR 200.112, the Recipient must disclose in writing any potential conflicts of interest to the Commission. In addition, 2 CFR 200.318 requires that Recipients maintain written standards of conduct covering conflicts of interest and governing the performance of their employees engaged in the selection, award, and administration of contracts. Refer to the *Recipient Guidelines and Requirements* document for further information on this subject.

11. Denali Commission Policies

Recipients may be required to comply with certain published Denali Commission policies. Any such requirements under this FAA will be stipulated in the Special Provisions. Refer to the *Recipient Guidelines and Requirements* document for further information on individual policies.

12. Laws and Regulations

Recipients are required to comply with all applicable Federal laws and regulations. General categories of potentially applicable laws and regulations are summarized below. Refer to the *Recipient Guidelines and Requirements* document for further information on specific laws and regulations that may apply.

- a. Debarment and Suspension
- b. Whistle-blower Protection
- c. Non-Discrimination
- d. Lobbying and Propaganda
- e. Environmental
- f. Drug-Free Workplace
- g. Travel
- h. Human Rights
- i. Animal Welfare
- j. Executive Compensation

13. Other Provisions

- a. The United States expressly disclaims any and all responsibility or liability to the Recipient or sub-recipients for the actions of the Recipient or sub-recipients resulting in death, bodily injury, property damages, or any other losses resulting in any way from the performance of this FAA, including sub-awards, contracts, or sub-contracts issued in connection with this FAA.
- b. To the maximum extent practicable, considering applicable laws, the Recipient shall accomplish the project contemplated by this FAA using local Alaska firms and labor.

- c. All terms and conditions contained in this FAA apply to any sub-recipient under this FAA.
- d. Failure to comply with the provisions of this FAA or maintain satisfactory performance may result in additional FAA conditions pursuant to 2 CFR 207. This includes but is not limited to: temporarily withholding of payments pending the correction of the deficiency; disallowance of project costs; wholly or partially suspending or terminating the FAA. In addition, failure to comply with the provisions of this FAA may also have a negative impact on the Recipient's eligibility for future Federal awards.

14. Special Provisions

Progress Reports: Quarterly

Pre-award Costs: n/a

Key Staff: AEA Project Manager, David Lockard

Advance Payments: n/a

Federal Property Interests and Reporting Requirements: n/a

Denali Commission Policies: n/a

Bonds and Insurance: n/a

15. Program Manager, Financial Manager & Other Contact Information

Denali Commission	Recipient
Don Antrobus Program Manager 510 L Street, Suite 410 Anchorage, AK 99501 Phone: 907-271-3500 Fax: 907-271-1415 E-mail: @denali.gov	David Lockard Project Manager 813 W Northern Lights Blvd Anchorage, AK 99503 Phone: 907-771-3062 Fax: 907-771-3044 Email: dlockard@aidea.org
Janet Davis Grants Management Officer 510 L Street, Suite 410 Anchorage, AK 99501 Phone: 907-271-3036 Fax: 907-271-1415 E-mail: jdavis@denali.gov	Amy Adler Financial Controller 813 W Northern Lights Blvd Anchorage, AK 99503 Phone: 907-771-3013 Fax: 907- 771-3044 Email: Aadler@aidea.org

Attachment A
to
Financial Assistance Award #1507
Between the Denali Commission and AEA for Mertarvik Energy Systems Planning and Design

SCOPE OF WORK

General: The Denali Commission is assisting the Newtok Village Council (NVC) with the relocation of the existing village site to Mertarvik, a new town site located approximately 9 miles away on Nelson Island. The relocation is driven by rapidly encroaching erosion and chronic storm driven flooding that is threatening the community's health and safety. It is estimated that the existing village site will no longer be viable within 4 years. The Denali Commission is engaging with the Alaska Energy Authority (AEA) to develop an energy master plan for the relocation project and to complete the design of power generation and bulk fuel systems in Mertarvik.

All designs shall comply with relevant state and federal requirements, including the Environmental Protection Agency, the Coast Guard, the National Electrical Safety Code, and Alaska Fire Marshal regulations.

NVC has selected DOWL as its Project Manager for the Newtok relocation effort. AEA will coordinate its activities with DOWL to ensure alignment with other ongoing relocation activities.

Energy Master Plan: Develop an Energy Master Plan for the Newtok to Mertarvik relocation project. At a minimum, the master plan shall include an analysis of the following elements:

- Village power requirements
- Incremental decommissioning of Newtok power systems
- Concurrent development of a power generation system in Mertarvik
- Potential for power intertie with other Nelson Island community.
- Capacity of systems for heat recovery and potential for district heating
- Renewable energy options and recommendations
- Siting criteria and considerations for power generation plant and bulk fuel farm
- Regulatory requirements

Power Plant Design: Develop design for a diesel powerhouse sized for a 20-year design life. The design shall be based on AEA's standard skid-mounted modular power house design site adapted for installation in Mertarvik. It shall include an appropriate level of generator redundancy, an automatic paralleling switchgear, a Supervisory Control and Data Acquisition (SCADA) system, a used engine oil blending system, and a heat recovery system. The plant shall also be design to integrate a renewable energy source in the future.

Power systems design shall include an electrical grid for Phase I infrastructure development including approximately 20 homes, Mertarvik Evacuation Center (MEC), washeteria, water well and construction camps.

Bulk Fuel System Design: Develop design for diesel and gasoline bulk fuel storage facility in Mertarvik. The facility shall be sized to provide sufficient capacity for a single annual fuel delivery over a 20-year design life. The facility shall include a barge fuel header system and dispensing facilities.

DELIVERABLES

Project deliverables shall include the documents listed below.

- Energy Master Plan sealed by an engineer registered in the State of Alaska
- Bid-ready plans and specifications for power plant and appurtenances
- Bid-ready plans and specification for bulk fuel system and appurtenances
- Detailed construction cost estimates for energy systems
- Construction and regulatory permits

BUDGET

The Commission is making \$379,430 available for the project via this Financial Assistance Award (FAA). The total estimated project budget is \$700,000. Additional funding up to the project budget will be made via amendment at a later date. Additional funding is anticipated by 31 December 2016. Pending availability of funding for the balance of the project budget, AEA shall advance the Energy Master Plan component of the work. Additional budget detail is provided on page 4.

DELIVERY METHOD

The AEA will utilize its existing Engineering Term Contractors to complete the planning and design elements of this project.

Geotechnical investigation is not included in this scope of work. Design engineers shall evaluate existing geotechnical data and advise if additional information is required to complete energy system design activities. Any additional site specific geotechnical data that is required will be obtained by others.

NEPA documentation is not included in this scope of work. NEPA activities shall be completed once construction funding has been secured. Project engineers shall consider and address any environmental issues that may later impede environmental permitting.

AEA acknowledges that there are multiple ongoing activities related to the relocation project that may inform or impact the design tasks of this award. During project delivery, AEA and its contractors will coordinate with other agencies concurrently working on the relocation effort. Currently ongoing relocation efforts include town site planning, sanitation facilities design, housing planning, geotechnical investigation and survey.

The Recipient agrees to cooperate and collaborate with the Denali Commission during the project, and understands that the Commission will be substantially involved in implementing the project or components of the project. Specifically, the Commission will participate in, and/or provide direct assistance during the project related to the following.

- The Environmentally Threatened Communities (ETC) Program Manager will review AEA design scopes and/or work orders prior to issuance to contractors. The objective of the review is to ensure alignment with other relocation activities.
- The AEA will provide courtesy copies of design milestones to the ETC Program Manager and the Owner (Newtok Village Council). These documents may be shared with other agencies and contractors as required to ensure coordination of all relocation activities.

SCHEDULE

The Period of Performance for this FAA is 15 October 2016 through 31 December 2017.

KEY MILESTONES

Draft Energy Master Plan Completed	30 April 2017
Final Energy Master Plan Delivered	31 May 2017
Conceptual Design Report	30 June 2017
65% Design Reports: Bulk Fuel and Power	31 August 2017
Final Design Delivery: Bulk Fuel and Power	30 November 2017

BUDGET			
<i>Line</i>	Item/Activity	Estimate	Notes
1	Project Management		
2	Project Manager	\$ 65,000	8 hours/week x 64 weeks x \$127/hour
3	Planning and Design		
4	Energy Master Plan Development Allowance	\$ 100,000	Approximately 4 man-months @ \$150/hour
5	Diesel Power Plant Design Allowance	\$ 250,000	8% of estimated construction cost; standard AEA module; survey/geotech by others.
6	Bulk Fuel Farm Design Allowance	\$ 270,000	9% of estimated construction cost; survey/geotech by others.
8	Indirect Costs		
9	10% Indirect Cost ¹	\$ 14,000	Applied to line 2 and the first \$25,000 of lines 4, 5, and 6.
10	Subtotal	\$ 699,000	
11	Total Project Budget (Rounded)	\$ 700,000	
12			
13	Amount of this Award	\$ 379,430	
	Notes		
	1. The Alaska Energy Authority (AEA) does not have a negotiated indirect cost rate; use the 10% de-minimis rate in 2 CFR 200.414		